L3	PC2 CIRCLE CLASS	
	Input	Standard input
	Output	Standard output
	Topic	Classes : **Sample Solution**

Problem Description

A class named `PC2Circle` is defined as follows.

- Private instance variable named `radius` that represents the radius of the circle.
- The constructor `PC2Circle()`that initialised radius to 0.0.
- `setRadius(double)` method to set a new radius value
- `getRadius()` method that returns the radius
- `getArea()` method that returns the area of the circle.
- `getCircumference()` method to returns the circumference of the circle.

The UML Class Diagram for class `PC2Circle` is as the following.

PC2Circle
-radius: double
+PC2Circle() +setRadius(radius:double): void +getRadius(): double +getArea(): double +getCircumference(): double
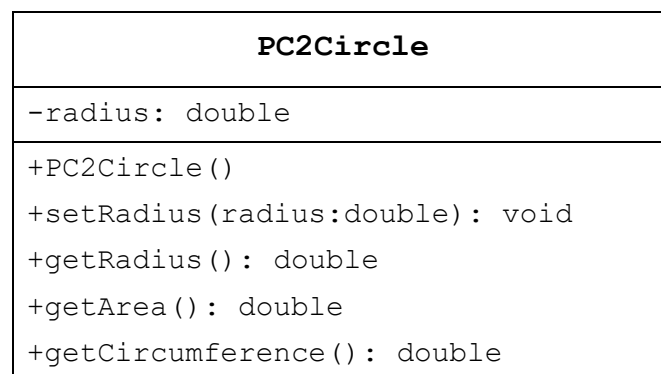
Write the code for `PC2Circle` class.

Write a program to test the `PC2Circle` class that reads the input and print the output as described below.

Input

The first line contains an integer n (1 ≤ n ≤ 50) which determines the number of test cases.

Each of the following n lines contains a positive real number r (0.0 ≤ r ≤ 500.00) which represents the radius of the circle.

Output

For each test case, the output contains a line in the format "Case #x: ", where x is the case number (starting from 1) follows by the radius, area and circumference of the circle. Format the output in 4 decimal places.

Sample Input Output

Sample Input	Sample Output
2 9.0 5.5	Case #1: 9.000 254.4690 56.5487 Case #2: 5.500 95.0332 34.5575

Solution template for this problem.

```
// File name: TestPC2Circle.java

public class TestPC2Circle {

    public static void main(String[] args) {

        // code for test class

    }

}



class PC2Circle {                    // NOT a public class

// code for Circle class

}
```